

# Safety

## Goals, Policies, and Actions

### OVERVIEW

The Safety Element provides the framework to reduce risks associated with a range of environmental and human-caused hazards that may pose a risk to life and property in Milpitas. Inclusion of the Safety Element in the General Plan is required by State law.

While the city's land, hillsides, and waterways are assets to the community, these features can present risks due to flood, geologic, and seismic hazards. In addition, human-caused risks, such as hazardous materials, can pose risks to community health and safety. Effective planning to prepare for and mitigate the adverse effects of these risks can help ensure that Milpitas maintains a high level of safety for its residents. The Safety Element includes goals, policies, and actions to protect residents, businesses, visitors, and land uses from hazards, and includes the following topics:

- Seismic and Geologic Hazards
- Flooding Hazards and Flood Protection
- Emergency Response and Disaster Preparedness
- Hazardous Materials

Background information regarding safety and hazards in Milpitas is presented in Chapters 3.2 and 4.0 of the General Plan Update Existing Conditions Report.

### GEOLOGIC AND SEISMIC HAZARDS

#### GOAL SA 1 MINIMIZE COMMUNITY EXPOSURE TO GEOLOGIC AND SEISMIC HAZARDS

**Policy SA 1-1:** Require development to reduce risks to life and property associated with earthquakes, liquefaction, erosion, landslides, and unstable soil conditions.

**Policy SA 1-2:** Ensure that all new development and construction is in conformance with all applicable building standards related to geologic and seismic safety.

**Policy SA 1-3:** Require geotechnical investigations to be completed prior to approval of any public safety or other critical facilities, in order to ensure that these facilities are constructed in a way that mitigates site-specific seismic and/or geologic hazards.

**Policy SA 1-4:** Development in areas subject to unstable soil and/or geologic conditions shall be reviewed by qualified engineers and or geologists prior to development in order to ensure the safety and stability of all new construction.

**Seismic and Geologic Hazards** include areas subject to groundshaking; soil liquefaction, erosion, landslides, and expansive soils. These geologic conditions can pose a risk to structures that are not appropriately designed and reinforced through proper engineering techniques.

**Policy SA 1-5:** Require an erosion and sediment control plan prepared by a civil engineer, or other professional who is qualified to prepare such a plan, as part of any grading permit application for new development. The erosion and sediment control plan shall delineate measures to appropriately and effectively minimize soil erosion and sedimentation.

**Policy SA 1-6:** All structures and building foundations requiring a building permit located within areas containing expansive soils, or other soils conditions which, if not corrected, would lead to structural defects, or unsafe conditions, shall be reviewed by a qualified engineer, who shall recommend corrective actions as appropriate to remedy onsite soil conditions.

**Policy SA 1-7:** All structures and additions requiring a building permit shall be designed and engineered to comply with the most current version of the California Code of Regulations (CCR), Title 24.

**Policy SA 1-8:** Where alterations such as grading and tree or vegetation removal are made to hillside sites rendering slopes unstable, planting of vegetation or other engineering means shall be required.

**Policy SA 1-9:** The use of drought-tolerant plants for landscaping in hillside areas shall be encouraged as a means to eliminate the need for supplemental watering which may result in increased soil erosion and slope instability.

#### **Actions in Support of Goal SA 1**

*Action SA 1a: Require the submission of geologic and soils reports for all new developments. The geologic risk areas that are determined from these studies shall have standards established and recommendations shall be incorporated into development.*

*Action SA 1b: Require adherence to the requirements of the California Code of Regulations (CCR), Title 24 in all areas of the city during the plan check review process.*

*Action SA 1c: Require that any facility, or residential structure, that is being increased more than 50 percent of the assessed value or physical size, conform to all provisions of the current building code throughout the entire structure.*

*Action SA 1d: When a change in natural grade or removal of existing vegetation is necessary, appropriate vegetative cover to stabilize slopes and reduce erosion shall be encouraged. This shall be accomplished through the development and design review process.*

*Action SA 1e: As applications for building permits to renovate, expand or remodel existing structures greater than 30 years old are received, identify and inspect potentially seismically unsafe buildings and structures, including unreinforced masonry buildings, to ensure that all applicable building code requirements are met.*

*Action SA 1f: Explore programs and funding sources that would encourage, assist, or provide incentives to property owners to retrofit their buildings for seismic safety, such as the Unreinforced Masonry (URM) program.*

*Action SA 1g: Periodically review the structural integrity of all existing City-owned critical facilities and, if any facilities are found unsatisfactory, take steps to ensure structural integrity and safety.*

*Action SA 1h: Continue to maintain and provide an inventory of all natural hazards, including active faults, Alquist-Priolo Special Study Zones, floodplains, hazardous soil conditions, and dam failure inundation areas.*

*Action SA 1i: Encourage Caltrans and Santa Clara County to seismically reinforce bridges in the Milpitas Planning Area.*

## *FLOODING*

### **GOAL SA 2      REDUCE RISKS TO LIFE, PROPERTY, AND PUBLIC SERVICES ASSOCIATED WITH FLOODING**

**Policy SA 2-1:** Participate in planning efforts undertaken at the regional, state, and federal levels to improve flood management facilities and dam safety throughout Santa Clara County.

**Policy SA 2-2:** Coordinate with regional and local agencies and private landowners to plan, finance, construct, and maintain local and regional stormwater management and conveyance facilities.

#### ***Flood Zones***

Flood zones are geographic areas that the Federal Emergency Management Agency (FEMA) has defined according to varying levels of flood risk and type of flooding. These zones are depicted on the published Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map

**Policy SA 2-3:** Require all development projects to demonstrate how storm water runoff will be detained or retained on-site, treated, and/or conveyed to the nearest drainage facility as part of the development review process. Project applicants shall demonstrate that project implementation would not result in increases in the peak flow runoff to adjacent lands or drainage facilities that would exceed the design capacity of the drainage facility or result in an increased potential for off-site flooding.

**Policy SA 2-4:** Ensure that construction activities and new development will not result in the creation of adverse, flood-related impacts to existing properties and/or flood control and drainage structures.

**Policy SA 2-5:** Unless otherwise mitigated, require new structures to be located outside of the 100-year floodplain. All new development within an identified Flood Hazard Area shall be built according to Federal Emergency Management Agency standards and comply with the provisions for flood hazard reduction criteria (Milpitas Municipal Code Section XI-15-5).

**Policy SA 2-6:** Encourage and accommodate multipurpose flood control projects that incorporate recreation, education, resource conservation, preservation of natural riparian habitat, and the scenic value of drainages, creeks, and detention ponds.

**Policy SA 2-7:** Encourage flood control measures identified within the Conservation Element such as bioswales, Low Impact Development (LID) strategies, green streets and parking lots and permeable materials that enhance natural drainage features, vegetation, and natural waterways, while still providing for adequate flood control and protection.

**Policy SA 2-8:** To the greatest extent possible, cooperate with the Santa Clara Valley Water District and Army Corps of Engineers in their development and improvement of flood control facilities which are intended to protect areas from the occurrence of the “1%” or “100-year” flood, or other flood events as required by the state.

**Policy SA 2-9:** Support state and federal legislation which provides funding for the construction of flood protection improvements in urbanized areas.

**Policy SA 2-10:** To the greatest extent possible, cooperate with the Santa Clara Valley Water District and Army Corps of Engineers in their efforts to develop and maintain additional flood protection retention facilities in areas where they are needed or where the design capacity of existing retention facilities cannot be restored.

**Policy SA 2-11:** As a part of the City’s policies for addressing the effects of climate change and projected water level rise in San Francisco Bay, require evaluation of projected inundation for development projects near San Francisco Bay or at flooding risk from local waterways which discharge to San Francisco Bay. For projects affected by increased water levels in San Francisco Bay, the City shall require incorporation of mitigation measures prior to the approval of the project. Mitigation measures that are to be incorporated into the project design or project location shall be developed by a qualified engineer, and completed in such a way so as to prevent exposure to substantial flooding hazards from increased water levels in San Francisco Bay during the anticipated useful lifetime of the structures.

#### **Actions in Support of Goal SA 2**

*Action SA 2a: As part of the development review process continue to require new developments to prepare hydraulic and storm drainage studies as necessary to define the net increase in storm water run-off resulting from construction and operation, and require mitigation to reduce identified impacts. Drainage and grading plans shall identify BMP protections and include standards established and recommended by the City that shall be incorporated into development.*

*Action SA 2b: Continue to participate in the National Flood Insurance Program (NFIP), and NFIP’s Community Rating System (CRS).*

*Action SA 2c: Continue to review projects in flood hazard areas to ensure compliance with Milpitas Municipal Code Title XI, Chapter 15 – (Floodplain Management Regulations).*

*Action SA 2d: Periodically Review Milpitas Municipal Code Title XI, Chapter 15 – (Floodplain Management Regulations), and revise as necessary to ensure that development standards are consistent with the requirements of state and Federal law.*

*Action SA 2e: Periodically Review the City of Milpitas Storm Drain Master Plan, and update as necessary, to ensure that the Plan includes a comprehensive list of capital improvements needed to maintain recommended levels of protection against flooding and stormwater runoff. Continue to seek new revenue streams to fund the necessary improvements and maintenance of the City’s storm drainage infrastructure.*

*Action SA 2f: Periodically review the condition of City-owned bridges, culverts, canals and other flood control and stormwater conveyance infrastructure, and when feasible include necessary improvements within the CIP to increase safety and the adequate conveyance of stormwater. Encourage external agencies to undertake regular review of their non-City-owned flood control and storm water infrastructure located within the Milpitas Planning Area, as well as those facilities located both upstream and downstream.*

*Action SA-2g: Require developers to adequately fund the costs of drainage facilities needed for surface runoff generated as a result of new development.*

*Action SA-2h: Monitor information from regional, state, and federal agencies on water level rises in San Francisco Bay on an on-going basis. Use this information to determine if additional adaptive management actions are needed and implement those actions to address flooding hazards from increasing sea levels for existing or new development and infrastructure.*

#### EMERGENCY PREPAREDNESS

#### **GOAL SA 3: ENHANCE SAFETY THROUGHOUT THE COMMUNITY BY ENSURING EMERGENCY PREPAREDNESS**

**Policy SA 3-1:** Ensure that new critical facilities in Milpitas are located in areas that minimize exposure to natural hazards.

**Critical Facilities** include: police stations, fire stations, hospitals, and other public or semi-public buildings that house critical first-responders or emergency management personnel.

**Policy SA 3-2:** Ensure that critical facilities are properly supplied and equipped to provide emergency services.

**Policy SA 3-3:** Ensure that critical facilities are designed and constructed to withstand the "maximum probable" seismic events and still remain capable of service use to provide emergency assistance after a major disaster.

**Policy SA 3-4:** Support local and regional disaster planning and emergency response planning efforts, and look for opportunities to collaborate and share resources with other municipalities in the region.

**Policy SA 3-5:** Continue to maintain the City's Emergency Operations Center and conduct regular staff training exercises to ensure that all City staff members, in addition to emergency responders, are adequately trained to fulfill their duties in the event of an emergency.

**Policy SA 3-6:** Maintain effective mutual aid agreements for fire, medical response, and other functions as appropriate.

**Policy SA 3-7:** Encourage residents and community leaders to participate in disaster training programs, such as the "Strategic Actions For Emergencies"

#### ***Emergency Preparedness***

Advanced emergency planning and preparedness can greatly assist in responding to natural disasters such as earthquakes, fires and floods, as well as human-caused disasters such as hazardous materials releases.

(S.A.F.E) emergency preparedness program and the Community Emergency Response Team (CERT) program. Where feasible, assist in neighborhood drills and safety exercises to increase participation and build community support.

**Policy SA 3-8:** Clearly communicate to the public the City's plans, procedures, and responsibilities in the event of a disaster or emergency.

**Policy SA 3-9:** Encourage residents to register with the Santa Clara County Emergency Alert System (AlertSCC) to ensure notification in the event of an emergency.

**Policy SA 3-10:** Continue to promote public safety through public education programs, and ensure programs are available and accessible to all segments of the community.

### **Actions in Support of Goal SA 3**

*Action SA 3a: Coordinate with the Santa Clara County Office of Emergency Services (OES) and other local agencies, as necessary, to participate in and implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for Santa Clara County.*

*Action SA 3b: Conduct regular emergency response training exercises and or participate in regional exercises to ensure that emergency response personnel are adequately trained and prepared for emergency situations. Critical facilities within the city should also be annually assessed to ensure they are properly supplied.*

*Action SA 3c: Publicize and regularly update information at City Hall, other public locations, and via the City website related to emergency and disaster preparedness including evacuation routes and specific steps to take in the event of a flood, fire, earthquake, or other emergency. Improve the visibility and accessibility of emergency and disaster preparedness information on the City's website by making information more prominent, more detailed, and by providing critical information in multiple languages.*

*Action SA 3d: Provide adequate funding for fire and police services to ensure preparedness of response teams and implementation of emergency response plans.*

*Action SA 3e: As part of the development review process, consult with the police and fire departments in order to ensure that the project provides adequate emergency access.*

*Action SA 3f: Encourage schools, neighborhood associations, mobile home park associations, and other interested groups to teach first aid and disaster preparedness, including Community Emergency Response Team (CERT) programs, Map Your Neighborhood programs, and other tools available to neighborhood and community groups to improve disaster preparedness.*

*Action SA 3g: Periodically review, maintain, and repair City roadways and emergency access routes, and provide signage, where necessary, to clearly identify emergency access routes.*

## *EMERGENCY SERVICES*

### **GOAL SA 4      *MAINTAIN A SAFE COMMUNITY BY PROVIDING RESPONSIVE, EFFICIENT AND HIGH QUALITY POLICE, FIRE, AND EMERGENCY SERVICES***

**Policy SA 4-1:** Provide adequate funding for police and fire facilities and personnel to accommodate existing and future citizens' needs to ensure a safe and secure environment for people and property throughout the city.

**Policy SA 4-2:** Continue to support community-based crime prevention. Support existing programs and encourage expanded or new programs that focus on youth crime prevention, anti-gang programs, or other community programs that reduce crime throughout the city.

**Policy SA 4-3:** Cooperate with neighboring cities, Santa Clara County, and regional agencies as necessary to address crime issues that cross jurisdictional boundaries.

**Policy SA 4-4:** Emphasize the use of physical site planning as an effective means of enhancing safety and preventing crime.

**Policy SA 4-5:** Coordinate with VTA security and BART Police, to address emerging safety concerns near BART, and VTA facilities in Milpitas.

**Policy SA 4-6:** Continue to promote publically-accessible crime reporting and crime mapping data.

**Policy SA 4-7:** Continue to work cooperatively with state, regional, and local public agencies with responsibility for fire protection in hillside areas.

**Policy SA 4-8:** Ensure that fire and emergency medical services meet existing and future demand by maintaining a response time of four minutes or less for all urban service areas.

**Policy SA 4-9:** Ensure that adequate water supplies are available for fire-suppression throughout the city. Require development to construct and fund all fire suppression infrastructure equipment needed to provide adequate fire protection services to new development.

**Policy SA 4-10:** Promote community safety through education by supporting community events including National Night Out, neighborhood watch programs, increased community training opportunities, and expanding emergency preparedness outreach and opportunities to traditionally underserved/underrepresented areas and communities within the city.

#### **Actions in Support of Goal SA 4**

*Action SA 4a: As part of the development review process, consult with the Police Department in order to ensure that the project facilitates adequate police services and crime prevention measures. The use of physical site planning as an effective means of preventing crime, including lighting, visibility, and video surveillance requirements shall be determined by the Police Department, where applicable.*

*Action SA 4b: As part of the development review process require applications to be reviewed by the Public Works Department and Fire Department in order to ensure that development projects facilitate adequate fire services, access, and fire prevention measures.*

*Action SA 4c: Conduct periodic Police and Fire Department evaluations that analyze response times and other incident data to ensure adequate services are provided throughout the city.*

*Action SA 4d: When reviewing development applications, consider the use of technology as a means of crime reduction. i.e. video surveillance requirements for new structures.*

*Action SA 4e: Periodically review crime data for emerging trends in citywide crime, and continue to adapt to a changing crime environment as necessary to maintain community safety.*

## *HAZARDOUS MATERIALS*

### **GOAL SA 5      PROTECT CITIZENS FROM HAZARDOUS MATERIALS**

**Policy SA 5-1:** Require hazardous waste generated within Milpitas to be disposed of in a safe manner, consistent with all applicable local, state, and federal laws.

**Policy SA 5-2:** Hazardous materials shall be stored in a safe manner, consistent with all applicable local, state, and federal laws.

**Policy SA 5-3:** Ensure that businesses in Milpitas that handle hazardous materials prepare and file a Hazardous Materials Business Plan (HMBP), and Hazardous Materials Inventories. The HMMP and Inventory shall consist of general business information, basic information on the location, type, quantity, and health risks of hazardous materials, and emergency response and training plans.

**Policy SA 5-4:** Use the environmental review process to comment on Hazardous Waste Transportation, Storage and Disposal (TSD) Facilities proposed in the Milpitas Planning Area and throughout the County to request a risk assessment and ensure that potentially significant, widespread, and long-term impacts on public health and safety of these facilities are identified and mitigated, as such impacts do not respect jurisdictional boundaries.

**Policy SA 5-5:** As feasible, minimize the use of toxic cleaning supplies and products in civic facilities, and minimize the City's use of pesticides, herbicides and fertilizers during landscaping and outdoor municipal operations.

**Policy SA 5-6:** Encourage residents and businesses to minimize the use of toxic materials and products including the application of pesticides, herbicides and fertilizers.



## **Actions in Support of Goal 5A**

*Action SA 5a: Require that applications for discretionary development projects provide detailed information regarding the potential for the historical use of hazardous materials on the site, including information regarding the potential for past soil and/or groundwater contaminations. If warranted, identify and require mitigation measures to ensure the exposure to hazardous materials from historical uses has been mitigated to acceptable levels consistent with EPA and/or DTSC standards.*

*Action SA 5b: Request that the environmental review pursuant to CEQA and/or NEPA of proposed hazardous waste TSD facilities outside of the City's jurisdiction but within the County shall address the following risk assessment components:*

- A worst case description estimating the number, type, scale, scope, location, and operating characteristics of proposed TSD facility(ies) based on the projected volumes and types of hazardous waste;*
- An assessment of risk resulting from the accidental release, fire, and explosion of hazardous waste. This assessment should take into account all phases of operation including transport, storage, and treatment. The assessment of risk should include the probability of occurrence of an adverse event and magnitude of impact;*
- Quantitative estimates of toxic air emissions, by applying emissions rates of existing facilities to the future volumes of hazardous waste, and identifying emissions for incinerator facilities under worse case circumstances;*
- An assessment of non-incineration alternatives for hazardous waste treatment such as chemical dechlorination for the detoxification of PCB's, dioxins, solvents and pesticides; photolysis; and biological treatment; and*
- Review of the operating characteristics of proposed TSD facilities, taking into account maintenance and operating procedures, emissions monitoring, and safety devices to assure the ongoing enforceability of the mitigating measures that are required.*

### ***Hazardous Materials***

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating irreversible illness; or (2) pose a substantial present or potential hazard to human health and safety, or the environment when improperly treated, stored, transported, or disposed of.

Hazardous materials are mainly present because of industries involving chemical byproducts from manufacturing, petrochemicals, and hazardous building materials.

*Action SA 5c: Continue to train local fire personnel in the specialized handling and cleanup procedures that are required for radioactive, toxic, and hazardous substance spills.*

*Action SA 5d: Require that Business License applications for businesses that use, store, or sell hazardous materials be reviewed by Fire Prevention Division to ensure operations comply with all applicable local, state, and federal laws and do not pose a risk to the public.*

*Action SA 5e: Support convenient opportunities to properly dispose of hazardous waste by maintaining information on the City's website about convenient drop-off programs for the local disposal of household hazardous waste offered by the Santa Clara County Department of Environmental Health, and other providers.*